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A Review of the Literature and Field Validation of the Competencies of Industrial and Organizational Trainers and Educators

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A Review of the Literature and Field Validation of the Competencies of Industrial and Organizational Trainers and Educators

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Abstract

The Ministry of Colleges and Universities, Ontario, commissioned a literature review and field validation of the competencies of industrial and organizational trainers and educators. The intent was to describe the current thinking on the necessary competencies of the growing profession of trainers in a variety of settings.

The research project identified 54 competencies organized into 15 functions. These 54 competencies were reviewed by three groups of practitioners. One group was composed of trainers organized by the Ontario Society for Training and Development. The second group was composed of representatives of various associations concerned with training, and the third group, organized by the Ontario Association of Continuing Education, was composed of adult educators.

The three groups validated 53 of the 54 original competencies, although they suggested a number of wording changes as well as a reorganization of the competencies within the 15 functions. They also suggested a number of additional competencies. A final list of 71 competencies was prepared and is included in this report.

Two attempts were made to further subdivide the competencies into specific tasks which could be used as the basis of a DACUM chart. The literature did not prove helpful in identifying tasks and the field validation groups were asked to help. Some interesting ideas were generated, and it was recommended that the Ministry fund a DACUM process to continue the work of identifying tasks.

The literature review identified seven different occupational roles within the training profession. The three field validation groups each identified from four to six roles. Each group was asked to select the competencies judged important for each role. In addition, the roles were analyzed using a semi-anthropological approach. The results of the role analysis indicate that while some roles (instructor/deliverer/teacher and designer/developer/program planner) were seen by the three field validation groups to require similar competencies there was a divergence of opinion concerning the needed competencies in the other identified roles. It was suggested that the remaining roles might be context-specific. If this is true, then it might be difficult to design a generic training program.

This research demonstrated the enormous scope of the training phenomenon. The roles, functions, and competencies identified in this report are just the tip of the iceberg. Nevertheless, this research has begun the process of clarifying occupational roles and the needed competencies. The principal investigators believe that this research has provided a good beginning, but that more investigation is needed.

I. INTRODUCTION

This is the final report of a project for the Ministry of Colleges and Universities: "A review of the literature and field validation of the competencies of industrial and organizational trainers and educators".

In the past ten years there have been numerous studies of trainer roles and related competencies. Studies of particular note include those by the American Society for Training and Development (McLagen, 1983); the Association for Educational Communications and Technology (1981); Bennett and Leduchowitz (1983); Chalofsky and Cerlo of the United States Civil Service Commission (1975); the Manpower Services Commission of the United Kingdom (1980); the Ontario Society for Training and Development (1979); and Pinto and Walker (1978). In addition, a number of doctoral studies from various universities have explored the question.

The purpose of the research was to conduct a literature review of the various studies to attempt to bring together the current knowledge in the field. Second, the researchers were to structure the findings in a manner that could be used for a design to train trainers. Finally, the research was to validate the findings through a series of meetings with trainers and adult educators.

Objectives of the Research

The Ontario Institute for Studies in Education agreed:

2.1.1 to conduct literature searches of data bases and of other appropriate literature;

2.1.2 to conduct a semi-anthropological analysis of identified skills and knowledge using content analysis to detect cultural aspects of the occupation;

2.1.3 to provide a list of identified competencies classified appropriately, displayed in a DACUM approach or others deemed satisfactory by the Ministry Supervisory Official.

2.1.4 to analyze materials from individual descriptions of daily activities and skills and knowledge required;

2.1.5 to produce an interim report organizing skills/knowledge of trainers in one or more training professions;

2.1.6 to review the contents of the above interim report with practitioners;

2.1.7 to produce an interim report of the practitioners' review;

2.1.8 to prepare and submit a final report which will include inventories of competencies which are to be identified, and displayed in a manner which could be used for the development of guidelines for training material for various occupations within the cluster.

Changes in the Procedure

The original contract envisioned a number of phases, each resulting in an interim report which would be incorporated into the final report. This final report meets the requirement of the contract, but in the process of the research a number of changes were necessitated.

First, two interim reports were written which contained the results of the literature review. As we will describe below, the literature review identified a number of roles and a list of competencies which were used in the field validation.

The original contract called for each competency to be broken down into more specific tasks for use in a training design. This requirement turned out to be very difficult. The research identified was quite inconsistent about categories smaller than a competency. The majority of the studies did not break the competencies down any further. In the instances in which there were finer subdivisions, their form varied immensely.

As a consequence, a major finding of this study is that it was not possible to clearly identify tasks from the literature review. This problem is discussed further in the section on tasks. The principal investigators made a further attempt to meet the objectives of the contract by modifying the lesson plan of the field validation in order to elicit tasks from the trainers and adult educators. This modification provided interesting information, but was unsuccessful in meeting the requirements for specific tasks. However, the results are presented in the task section of this report.

Second, time did not permit a separate interim report giving the results of the field validation. Those results are contained in this final report.

Discussion of Terms

In this report we have used a hierarchy of terms. At the highest level we talk about occupational roles (identified in Section IV). Within each of the roles there are a number of functions, subdivided into required competencies. In training curriculum development, each of the competencies needs to be further divided into specific tasks. These terms are defined in the attached glossary, which also defines the acronyms of a number of organizations.

II. COMPETENCIES

Results from Literature Review

A list of 54 competencies was generated from the literature review. These competencies were organized into 15 functions. The competencies were used in a number of instruments during the field-validation to see if practitioners would validate their importance, sort these competencies into roles, and assign a priority level for each competency for each role.

Field Validation

The findings of the field validation of the 54 identified competencies are clear. The results of Handout #1, used with each of the field validation groups, were that 53 of the competencies were strongly supported, while competency # 17, "Negotiating union agreements" was only weakly supported. We have eliminated this item, though it should be noted that some people did feel it was a competency that would be used by "managers". The field validation also collected additional suggested competencies. Items suggested by more than one person in more than one group have been added to the original 54 competencies.

Finally, we have reworded some of the original items in response to suggestions from the field validation. These changes have resulted in a new, revised listing of 71 competencies, which are presented in the next section. Competencies which have been added or changed substantially in wording are marked with an asterisk (*).

We would like to point out that competency statements are at different levels of validation. Competencies from the original list of 54 have been presented to and validated by the three practitioner groups. Competencies which have been added to the list or substantially rewritten have not been subjected to further validation.

These additional competencies will need to be subjected to further validation. The easiest way to do this is to fund the DACUM process recommended. Second, the number of competencies under a particular function does not necessarily reflect the relative importance of the function.

Revised List of Competencies

I *ASSESSING TRAINING NEEDS/PERFORMANCE GAPS

* 1. Developing and conducting training/requirements/needs/performance gaps surveys.

2. Carrying out job or skills analysis.

3. Analyzing learner characteristics and skills.

II *DECIDING TRAINING PRIORITIES

* 4. Projecting future training requirements/needs/performance gaps.

5. Specifying training goals.

III TRAINING POLICY DEVELOPMENT

6. Developing training policy and procedures.

7. Developing and using selection criteria for trainees.

IV PROMOTION OF TRAINING

* 8. Convincing people of the value of training, and appropriate intervention strategies.

9. Preparing and disseminating course announcements and catalogues.

V COORDINATION/LIAISON

* 10. Acting as an organizational representative to outside agencies in training related matters.

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* = Substantially rewritten or added items which have not been subjected to further validation.

* 11. Working with management and individuals to identify employee training needs/ requirements

VI *MANAGERIAL SKILLS/ADMINISTRATIVE SKILLS

* 12. Being aware of the nature of the business the organization you work for is engaged in.

13. Planning and scheduling training activities.

14. Writing proposals, budgets, and raising funds for training.

15. Identifying/developing/obtaining training facilities.

* 16. Recommending, purchasing and maintaining audio-visual equipment, including computers.

17. Developing, defending, and administering training budgets.

* 18. Managing training departments and their staff.

* 19. Designing and maintaining training systems/departments.

VII SELECTING, SUPERVISING TRAINING PERSONNEL

* 20. Recruiting, interviewing, selecting, and training internal training staff.

* 21. Recruiting, interviewing, selecting and supervising external contractors/training personnel.

VIII INSTRUCTIONAL (COURSE) DESIGN SKILLS

* 22. Preparing clear statements of goals/objectives.

* 23. Implementing adult learning process skills.

* 24. Preparing curricula/course designs.

* 25. Developing instructional strategies.

26. Preparing instructional materials of all types.

27. Selecting and developing audio-visual materials and devices.

* 28. Consulting with subject matter experts.

* 29. Designing computer-assisted instruction.

IX INSTRUCTIONAL (COURSE) DELIVERY SKILLS

* 30. Creating a learning atmosphere.

31. Conducting classroom training.

* 32. Using group dynamics process skills.

* 33. Processing results learners create in training activities.

34. Selecting and using audio-visual equipment.

35. Conducting/supervising on-the-job training.

36. Assisting transfer of learning to practical situations.

X COUNSELLING/ADVISING/SELECTING TRAINEES

37. Counselling individuals about their needs.

38. Assisting employees in planning career development.

39. Clarifying eligibility requirements for specific programs.

40. Selecting trainee candidates.

XI ORGANIZATIONAL CONSULTING

* 41. Consulting with management about organizational change, trends, and development.

* 42. Being a catalyst for organizational change.

XII COMMUNICATION AND INTERPERSONAL SKILLS

43. Communicating effectively orally.

44. Communicating effectively in writing.

45. Preparing effective (statistical) reports.

46. Conducting effective meetings.

* 47. Mediating differences.

48. Conducting effective interviews.

* 49. Listening/empathizing skills.

XIII EVALUATION

* PART ONE - Evaluation of Staff

50. Identifying and setting performance standards.

51. Assessing staff performance.

52. Following up on effect of train-the-trainer efforts.

* PART TWO - Evaluation of Product

* 53. Assessing learning from product.

54. Assessing performance of trainees.

* 55. Measuring results of training against objectives.

56. Determining costs and benefits of training.

* 57. Following up on the effect of train-the-trainer efforts.

* 58. Evaluating effectiveness of packaged programs.

*PART THREE - Evaluation of External Contractors

* 59. Assessing learning from product.

60. Assessing performance of trainees.

* 61. Measuring results of training against objectives.

* 62. Determining costs and benefits of training.

63. Evaluating effectiveness of external contractors.

XIV RESEARCH

64. Constructing questionnaires and surveys.

65. Designing testing instruments.

66. Collecting data and statistics.

67. Scanning/synthesizing and drawing conclusions from data.

68. Locating, interpreting, and evaluating research.

69. Encouraging research in training and development.

XV PROFESSIONAL DEVELOPMENT

70. Keeping informed through professional development.

* 71. Assessing self development needs, values, and beliefs.

III TASKS ASSOCIATED WITH EACH COMPETENCY

The contract calls for the competencies to be displayed in a DACUM format in order to facilitate the development of an instructional curriculum for the preparation of trainers. In order to be useful, the DACUM must be detailed enough to plan the instruction. Thus, it was desirable that the competencies be further divided into tasks.

While it seemed this problem could be solved in an original study, it turned out to be very difficult for a literature review to pinpoint tasks related to specific competencies. There was no consistency in the more specific items reported in various studies. Thus, it was not possible to identify and collate results related to tasks in the same way as results related to roles and competencies.

There are probably a number of reasons for this wide variation among studies. First, the concept "competency" is quite abstract. A competency entails the possession of knowledge, the ability to perform necessary skills, and higher order cognitive abilities, such as the ability to critically evaluate information and data. As a consequence of the abstract nature of competencies, different studies chose varying ways to report a more specific level of skills. Some reported areas of knowledge, some reported skills at different levels of specificity, and some simply subdivided the competency into different areas of application.

This section of the report contains the result from the literature review and the brainstorming activity in the field validation.

Results from the Literature Review

As reported above, it was not possible to identify tasks from the literature. This section will examine some of the different approaches to further defining competencies.

As a beginning, it is helpful to look at the American Society for Training and Development's Model of Excellence (1983). McLagen argues that the more specific level of competency should be presented as example behaviours.

> Selecting a definition method is easier, however, if we consider the nature of a competency: It is invisible except through behaviors which reflect it. Since we can only know a competency through its application -- in tests, on the job, in crises, etc. -- then, in most instances, the best way to define a competency is through examples. (1980, p. 24)

Model of Excellence presents thirty pages of example behaviours, one page of examples for each competency. However, an examination of these sample behaviours indicates several problems in using them as tasks for a DACUM.

First, while the example behaviours provide some assistance in identifying different levels of the competency, they make no attempt to include of the entire range of behaviours associated with it.

Second, there is no attempt to distinguish between critical behaviours and less important ones. Therefore it is difficult to use the example behaviours as a base for designing a training curriculum.

It is interesting to note that the ASTD study did include a list of outputs from each role identified that might be used in a future study to begin to identify tasks associated with each competency (1983). The Ontario Society for Training and Development's Competency analysis for trainers: A personal planning guide (1979), provides a little more help. For example, OSTD breaks each role down into knowledge and skill components. These subdivisions might be helpful in further defining the competencies and we suggest that the Ministry might use this guide as a first step in a further DACUM exercise.

However, it should be noted that the OSTD format does not address all of the issues identified by McLagan. For example, the OSTD model does not address higher order cognitive skills such as the evaluation of data. In addition, while a wide spectrum of knowledge is identified, there is too little attempt to rank the importance of different kinds of knowledge. No doubt further work by the Society in this area will be undertaken, but the document available to us is still limited in these ways.

One final problem with the identification of tasks should be noted. Even when we found further subdivisions of competencies, we often found that the subdivisions themselves were abstract. For example, the Association for Educational Communications and Technology (1981, p.14) lists the competencies expected of an instructional/training development specialist. One example is presented here:

A competent instructional/training development specialist is able to:

1. Determine Projects Appropriate for Instructional development.

   -Analyze information regarding potential projects and decide if instructional development is appropriate.

   -Discriminate situations requiring instructional solutions from those requiring other solutions (e.g., job redesign, organizational development, etc.).

- Judge the appropriateness of project selection decisions and provide a rationale for the judgment. (p. 14)

It is clear that the behaviours indicated above are quite abstract. They do provide a further definition of the competency and they are examples of the higher order cognitive skills, but they are not tasks.

As a consequence of these difficulties in identifying the tasks through a literature review, we included a brainstorming exercise in the field validation to attempt to identify tasks.

Results from the Field Validation

Identifying tasks through brainstorming proved to be much too large an activity for the time permitted in the Meeting Procedure of the Field Validation. Though all three groups worked diligently, none were able to produce adequate task lists for the 54 competencies in the original list. The results of the work done in this area, based on the use of Handout #2, are included in the raw data contained in Appendix 5.

No effort has been made to process or rework the brainstormed task listings. We felt that if such a task listing is to be developed, a number of three-day DACUM workshops should be convened, with practitioners of each role meeting separately. A sample proposal for this activity is included as Appendix 6.

IV ROLES OF TRAINERS

Literature Review

From the literature review a total of 44 individual roles were collected, with a good deal of overlap among them.

The total list was grouped into seven different roles. This collapsed list is presented below, with each general role followed by a list of role titles associated with it in the literature.

1. Instructor
    a. Transfer agent
    b. Group facilitator
    c. Media specialist
    d. Instructor
    e. Classroom teacher
2. Designer of Instructional Materials
    a. Theoretician
    b. Program designer and developer
    c. Program designer
    d. Producer of material resources
    e. Instructional writer
    f. Designer
    g. Curriculum writer
    h. Task Analyst

i. Learning specialist

j. Procurer of external resources

3. Manager

a. Strategist

b. Program manager

c. Program administrator

d. Needs analyst

e. Manager of training and development

f. Manager

g. Administrator

h. Budget and personnel manager

i. Evaluator of training approach

j. Trainer and supervisor of trainers

4. Consultant to Management

a. Consultant

b. Organization developer

5. Researcher and Evaluator

a. Researcher/evaluator

b. Researcher

c. Evaluator

d. Job and performance evaluator

6. Counsellor and Advisor

a. Career development specialist

b. Individual development counselor

c. Individual planning counselor

7. Training promoter

a. Public relations agent to managers

b. Marketer

Semi-Anthropological Analysis of Roles

The importance of the examination of a group of successful American commercial organizations by Peters & Waterman (1982) lies not only in the authors' attempt to demonstrate why these organizations have been so successful, but in the novel perspective that they bring to their investigations. Instead of limiting themselves to the more conventional elements of organizational analysis (the balance sheet, product design, organizational structure, profiles of senior officers, financial history, and market analysis), the authors broadened their explorations to emphasize factors more familiar to an anthropologist than to an economist, a sociologist or a student of organization. As well as considering the overall history of the organization, they looked at events and practices more characteristic of communities or societies than of large, "rational" commercial organizations: the existence of heroes; myths and legends of past achievements; familiar and recurring words, phrases and slogans; casual and informal but persistent relationships between groups and individuals within the organization; and loyalties. These characteristics, more commonly associated with matters of "culture", are found closer to the affective than the rational end of the spectrum of human behaviour.

This perspective seems of particular significance to this investigation since it is arguable that it is precisely the presence of long-term commitment to education and training - that is, to the nourishment and support of learning among employees (a characteristic common to all the organizations investigated by Peters & Waterman) - that aids in the transformation of a large, purportedly "rationalizing" organization, to something approximating a "community" with a discernible cultural characteristic. The self-conscious support of learning and the presence of cultural phenomena seem inextricably related. It is likely that the "cultural perspective" of the Peters & Waterman investigation emerged as a result of their thoughtful and systematic explorations, rather than being a predetermined methodology.

It follows that a cultural perspective will be essential in the investigation of the roles of "industrial and organizational trainers and educators", roles central to the "nourishment of learning" among employees in the organization.

Therefore, this section of our investigation attempted to capture whatever aspects we could of the "cultural" characteristics of the performance of the roles under investigation, and of the cultural environments in which the roles are performed. A description of the methods employed, and of their limitations, can be found in Appendix D.

We looked for qualitative aspects of the performance of these roles and of the lives of the individuals performing them. The value in such an investigation lies in providing some shading for the lists of competencies and tasks that appear in job analyses; that is, in establishing an approach to weighting the importance of one task in comparison with another. For example, the ranking of skills in oral or written communication varies considerably (pages 20-25). Some further analysis of other designated skills would presumably indicate dependence upon one or other of these two predominant forms of communication. However, Yule (1978), in his careful description of what five individuals in such roles actually did all day, points out that a considerable part of their time was spent on the telephone. If we add to that observation the frequency with which the term "coordination" appears in job descriptions and lists of competencies (a somewhat vague term in the currency of organizational language), we get some insight into the significance of a particular form of oral communication in the performance of these roles; a significance so taken for granted that it is hardly noticed.

Implicit in the objectives of these investigations into competencies and tasks is the need to develop clear, communicable, and dependable designations of occupations: what activities they involve, and how the skills associated with those activities may be acquired. The presumption is that these designations will be true: that is, applicable to enough differing organizations that individuals possessing them are theoretically interchangeable. For example, we have a sense of what an engineer <u>is</u>, if not always what he or she <u>does</u>: the term is communicable across organizational distances.

Arthur Miller's North American classic, Death of A Salesman, depends upon our sense of what a salesman does, regardless of the specific context. Miller was pre-occupied with conveying to us what a salesman is. There are operating generic terms, such as manager, supervisor, foreman, that have gained sufficient currency to be understood beyond a particular environment. If this were not so, a very large part of employment-related education, particularly of the "continuing" kind, would be impossible. Along with these familiar terms go certain assumptions, which play a significant part in the attitudes and behaviour of individuals associated with them. It is assumed that the titles, used both for purposes of employment and for purposes of status and identity, are consistent and recognizable. it is further assumed that there is some consistency in background, career expectations and ambitions among people holding the positions, and that income or at least income range can be assessed.

A different, more functional, understanding of positions is based on assumptions about what individuals enjoying a particular title actually do; whom they relate to within the particular organization; how much authority, influence, or power they have, and over whom and what; how long they remain in those positions; and, how much security they have. The popular and frequently erroneous assumptions about the differences between public and private employment most often relate to the last assumption.

Implicit in the interests of the "job analysts" and the "educators" is the view that the less organization-specific a title and its associated competencies and skills the more public visibility and prestige a role will have, and the easier it will be to provide common preparation in agencies of public instruction.

1. Titles: The slight ambivalence in the title of this report, Industrial and Organizational Trainers and Educators, suggesting at least four classifications that have, in the past, been considered quite separate, is more than borne out by a consideration of the nineteen titles used in ten organizations. Each description was supplied on the basis of a request for "training" job descriptions. The list includes: Safety Trainer, Staff Development Officer, Consultant-Goal Setting and Review, Senior Staff Development Officer, Supervisor Staff Development, Head-Staff Development and Training, Consultant Specialist, Supervisor-Technical Training, Staff Development Consultant, Supervisor-Training and Development, Director Equal Opportunity Program, Senior Manager-Training and Development, National Sales Training Manager, Human Resource Developer, Sales Training Coordinator, Manager-Operations and Management Training, Management Training Manager, Manager Operational Training, and Training Coordinator.

Within a single organization the titles in use may be clear, both in terms of job content and relationships to others in the organization, though there is some evidence that not even that is the case. What is apparent is that the titles, assuming that they refer to competencies and skills sufficiently common to justify their inclusion, vary enormously from one organization to another.

Further evidence of this is to be found in the consistent reporting by Training Magazine that their estimate of expenditures includes only those direct expenditure of units labelled within the training-human resource development spectrum. If they were to include estimated expenditures on training and development outside of these units, the totals would be more than trebled. It is clear that not only is there a wide range of role titles across and within organizations (for example, Technical and Management Trainers are traditionally separate) but that individuals and units engaged in training activities of some kind are widely dispersed.

2. Backgrounds: In the absence of adequate Canadian data we turned to the most recent report from Training Magazine (1985). Three disciplines - education, business, and social sciences - account for the undergraduate specialties of half of the training managers and of those in the "other" category. More than half of all training specialists say they studied education, psychology, or the social sciences. More training managers and "other" respondents hold graduate degrees in business and management than do training specialists, although the most common degree among all respondents is in education (page 79).

Of equal significance is the finding that few individuals had education in "training" prior to employment: most learned on the job of the specialty and what it involved. When asked about their previous positions, "the most frequently selected responses included personnel specialist, technical specialist and line manager" (page 79-80). Finally, "when we asked respondents to select their long-term career objectives from a list of generic possibilities, training and development specialist was by far the most prevalent ambition, a fairly strong indication that those in human resources development are satisfied with their current position" (page 79).

This last point contrasts with the practice of some large organizations in Canada, which regard a period in training as part of the development of a promising young executive. The notion of a lifetime career in training appears to be emerging and may be one of several factors which would afford trainers greater visibility and higher negotiated status.

3. Salaries: The assumption that a title provides some information about salary range seems to be increasingly true with respect to training. The 1985 Training Survey (Training, 1985) reports a range of average salaries from $32,000 to $39,000, ranging from managers to specialists. The pattern suggests increasing standardization across organizations in the United States, despite the variation in titles. Standardization of salaries is usually the result of standardization and clarification of job descriptions, and therefore of roles. It exercises a considerable influence in the standardization of image which is one of our

principal concerns in this analysis. It would not do to put too much emphasis on titles. They are only words after all. But they increase in importance as we move beyond the specific job setting, and beyond the specific organization. What can you tell people who ask at parties what you do and, by implication, who and what you are? That problem is not insignificant in the emergence of a legitimate and powerful role.

The next order of questions, ranging from "What does a trainer do every day" to "What authority, influence or, power implicit and explicit, does he or she have?" presents greater difficulties. Our research indicates a decreasing parallelism as we move from the roles of instructor/teacher through designer/planner, manager/manager, to consultant/consultant (page 19). The finding is perhaps predictable, since the terms themselves are indicative of their freedom, or lack of it, from specific context. Even at that, we have some sense that the term instructor, conventionally associated with formal education settings, means various things when applied in other settings, which for the most part involve adult learners.

However, the information supplied by job descriptions about the relationship of the specific role within the hierarchy - that is, who reports to whom and who has access to whom - suggest that while there may be a growing clarity with respect to these roles, they differ dramatically in this respect from other apparently similar roles in organizations. The Association for Education Communications and Technology states that "a competent instructional/training development specialist is able to discriminate situations requiring instructional solutions from those requiring other solutions, e.g., job redesign, organizational development, etc." Since the specialist may be very low in the company hierarchy, the responsibility for what can be termed jurisdictional decisions is one not usually shared by individuals of equal rank in other parts of the organization. It demands a degree of independence of judgement and authority not usually associated with that position. Similarly, other job descriptions indicate a movement through the organization and contact with other ranks that are unique to training roles. The need to learn touches everyone in the organization in a personal manner that is unlike any other common need of personnel. Trainers frequently observe that they know more about circumstances and individuals in other parts of the organization, both above and below them in nominal rank, than their own rank entitles them to know. It is a risky power to possess, and there is little in the literature that deals with the problems it presents and how they can be handled. However, that information is inescapably organization-specific, which may be one of the reasons why the delineation of actual tasks grows more difficult as one ascends from instructor-teacher to manager/manager and that most elusive of all designations, consultant/consultant.

The information examined in this section is suggestive. What we are after is 'images', 'perceptions', and 'feelings' about the roles in question, the phenomena that underlie the precision of described competencies and task delineations but that, in both the long and short run, may determine whether a role or roles will survive and prosper. We are certainly witnessing the gradual emergence of roles which can be analysed, clarified and objectified. But we also seem to be witnessing a different mixture of generic and setting/organization-

specific ingredients. We may also be witnessing the cutting edge of the emergence of whole new organizational patterns. Trainers may be pioneers as well. That is clearly the implication of the work of Peters and Waterman.

We know from other settings that the management of learning in any organization, including a society, is one of the most elusive and exasperating but critical of problems, since it is always altering its own dimensions. There is every reason to try to apply the DACUM method to these roles, and to encourage their emergence as communicable across organizational distances. There is also good reason to treat the outcomes with caution, to allow much greater flexibility between competencies and tasks than is usual, and to view the patterns as film rather than as still photographs. We need to avoid the circumstance of Orlando's horse, which had every noble characteristic a great war horse should have, except that it was dead.

Field Validation

Each of the three field validation groups was asked to identify different training roles. The results of this exercise are presented below. All three groups identified roles which dealt with the same basic functions, although the Association Group and the OACE Group drew finer distinctions for some roles. These results are discussed further in the next section, in which specific competencies are linked to each role.

Roles Identified By Each of the
Field Validation Groups

OSTD GROUP	ASSOCIATION GROUP	OACE GROUP
Instructor	Deliverer	Teacher/Counsellor
Designer	Developer	Program Planner
Manager	Manager	Manager
Consultant	Consultant	Consultant
	Administrator	Researcher/evaluator
		Promoter/Marketer

Weighting of Competencies By Role

The findings in this area are probably most useful in designing future training programs for organizational trainers and educators.

Looking at the raw data generated for this area on Handout #3 is initially overwhelming; but when we separate out the top ten competencies for each role, as weighted by each group, and compare them across groups, we find a reasoably strong comparability for the instructor/deliverer/teacher role, and a fair amount of comparability for the designer/developer/program planner role. Surprisingly, the manager role was seen quite differently by the three groups. The final role, that of consultant, shows similarities only in the first few competencies.

These data clearly indicate that while different groups of trainers and adult educators use similar terms to describe the roles involved in training, they have quite different ideas about the essential competencies required by each role.

This difference in emphasis probably explains why organizational trainers and educators find workshops or courses put on by people not in their field to be only marginally valuable. It may also explain why industrial trainers in the technical-skills area find it so difficult to speak with industrial trainers engaged in management training; these two very similar types of professionals probably emphasise different competencies even though they say they use similar competencies.

Lists of the top ten competencies by roles within each group follow. In developing these lists from the raw data, the following rules (in order) were used to break any ties, i.e., instances in which similar values were obtained for two competencies:

1. The competency with the higher mean was placed first.

2. If the means were equal, then the total weightings were used.

3. If the total weightings were equal, then the competency with the higher number of people responding was placed first.

4. If the number of people responding was equal, the competencies were listed in the order found in the original list of competencies.

OSTD GROUP

TOP TEN COMPETENCIES FOR EACH

IDENTIFIED ROLE

Instructor

Rank	Competency
A	34. Communicating effectively orally.
B	54. Keeping informed through professional development.
C	25. Conducting classroom training.
D	41. Assessing performance of trainees.
E	40. Assessing learning attainment.
F	24. Motivating trainees.
G	28. Assisting transfer of learning to practical situations.
H	37. Conducting effective meetings.
I	26. Selecting and using audio-visual equipment.
J	35. Communicating effectively in writing.

Designer

Rank	Competency
A	54. Keeping informed through professional development.
B	23. Consulting with subject matter experts.
C	21. Preparing printed instructional materials.
D	22. Selecting and developing audio-visual materials and devices.
E	35. Communicating effectively in writing.
F	20. Preparing clear statements of goals.
G	49. Designing testing instruments.
H	52. Locating, interpreting, and evaluating research.
I	40. Assessing learning attainment.
J	48. Constructing questionnaires and surveys.

Manager

Rank	Competency
A	6. Developing departmental training policy and procedures.
B	18. Recruiting, selecting, and training internal staff.
C	54. Keeping informed through professional development.
D	16. Developing, defending, and administering training budgets.
E	35. Communicating effectively in writing.
F	11. Advising management of employees' training needs.
G	39. Conducting effective interviews.
H	37. Conducting effective meetings.
I	36. Preparing effective statistical reports.
J	19. Recruiting, selecting, and supervising external contractors.

Consultant

Rank	Competency
A	54. Keeping informed through professional development.
B	51. Scanning/synthesizing and drawing conclusions from data.
C	33. Consulting with management about organizational change and development.
D	34. Communicating effectively orally.
E	37. Conducting effective meetings.
F	52. Locating, interpreting, and evaluating research.
G	39. Conducting effective interviews.
H	35. Communicating effectively in writing.
I	36. Preparing effective statistical reports.
J	1. Developing and conducting training needs surveys.

ASSOCIATIONS GROUP

TOP TEN COMPETENCIES FOR EACH
IDENTIFIED ROLE

Administrator

Rank	Competency
A	15. Purchasing and maintaining audio-visual equipment.
B	9. Preparing and disseminating course announcements and catalogues.
C	54. Keeping informed through professional development.
D	14. Identifying/developing/obtaining training facilities.
E	12. Planning and scheduling training activities.
F	34. Communicating effectively orally.
G	35. Communicating effectively in writing.
H	36. Preparing effective statistical reports.
I	16. Developing, defending, and administering training budgets.
J	8. Convincing people of the value of training.

Deliverer

Rank	Competency
A	25. Conducting classroom training.
B	34. Communicating effectively orally.
C	24. Motivating trainees.
D	35. Communicating effectively in writing.
E	54. Keeping informed through professional development.
F	26. Selecting and using audio-visual equipment.
G	41. Assessing performance of trainees.
H	28. Assisting transfer of learning to practical situations.
I	21. Preparing printed instructional materials.
J	40. Assessing learning attainment.

Developer

Rank	Competency
A	35. Communicating effectively in writing.
B	48. Constructing questionnaires and surveys.
C	54. Keeping informed through professional development.
D	23. Consulting with subject matter experts.
E	49. Designing testing instruments.
F	3. Analyzing learner characteristics and skills.
G	34. Communicating effectively orally.
H	2. Carrying out job or skills analysis.
I	5. Specifying training goals.
J	22. Selecting and developing audio-visual materials and devices.

Manager

Rank	Competency
A	8. Convincing people of the value of training.
B	38. Mediating differences between staff.
C	16. Developing, defending, and administering training budgets.
D	47. Determining costs and benefits of programs.
E	42. Measuring indirect results of training.
F	10. Acting as an organizational representative to outside agencies.
G	54. Keeping informed through professional development.
H	34. Communicating effectively orally.
I	46. Evaluating the effectiveness of outside contractors.
J	4. Projecting future training needs.

Consultant

Rank	Competency
A	54. Keeping informed through professional development.
B	29. Counselling individuals about their needs.
C	34. Communicating effectively orally.
D	35. Communicating effectively in writing.
E	5. Specifying training goals.
F	20. Preparing clear statements of goals.
G	33. Consulting with management about organizational change and development.
H	49. Designing testing instruments.
I	2. Carrying out job or skills analysis.
J	4. Projecting future training needs.

OACE GROUP

TOP TEN COMPETENCIES FOR EACH
IDENTIFIED ROLE

Researcher/Evaluator

Rank	Competency
A	50. Collecting data and statistics.
B	54. Keeping informed through professional development.
C	40. Assessing learning attainment.
D	48. Constructing questionnaires and surveys.
E	36. Preparing effective statistical reports.
F	42. Measuring indirect results of training.
G	47. Determining costs and benefits of programs.
H	2. Carrying out job or skills analysis.
I	41. Assessing performance of trainees.
J	1. Developing and conducting training needs surveys.

Consultant

Rank	Competency
A	33. Consulting with management about organizational change and development.
B	34. Communicating effectively orally.
C	54. Keeping informed through professional development.
D	37. Conducting effective meetings.
E	23. Consulting with subject matter experts.
F	30. Assisting employees in planning career development.
G	29. Counselling individuals about their needs.
H	39. Conducting effective interviews.
I	2. Carrying out job or skills analysis.
J	11. Advising management of employees' training needs.

Teacher/Counsellor

Rank Competency

A	25.	Conducting classroom training.
B	21.	Preparing printed instructional materials.
C	22.	Selecting and developing audio-visual materials and devices.
D	54.	Keeping informed through professional development.
E	27.	Conducting/supervising on-the-job training.
F	24.	Motivating trainees.
G	3.	Analyzing learner characteristics and skills.
H	35.	Communicating effectively in writing.
I	40.	Assessing learning attainment.
J	20.	Preparing clear statements of goals.
K	23.	Consulting with subject matter experts.

Program Planner

Rank Competency

A	54.	Keeping informed through professional development.
B	4.	Projecting future training needs.
C	12.	Planning and scheduling training activities.
D	20.	Preparing clear statements of goals.
E	35.	Communicating effectively in writing.
F	1.	Developing and conducting training needs surveys.
G	5.	Specifying training goals.
H	3.	Analyzing learner characteristics and skills.
I	6.	Developing departmental training policy and procedures.
J	23.	Consulting with subject matter experts.

Manager

Rank Competency

A 47. Determining costs and benefits of programs.
B 37. Conducting effective meetings.
C 54. Keeping informed through professional development.
D 39. Conducting effective interviews.
E 12. Planning and scheduling training activities.
F 35. Communicating effectively in writing.
G 13. Writing proposals and fund raising for training.
H 6. Developing departmental training policy and procedures.
I 18. Recruiting, selecting, and training internal staff.
J 14. Identifying/developing/obtaining training facilities.

Promoter/Marketer

Rank Competency

A 8. Convincing people of the value of training.
B 9. Preparing and disseminating course announcements and catalogues.
C 35. Communicating effectively in writing.
D 10. Acting as an organizational representative to outside agencies.
E 11. Advising management of employees' training needs.
F 54. Keeping informed through professional development.
G 36. Preparing effective statistical reports.
H 47. Determining costs and benefits of programs.
I 13. Writing proposals and fund raising for training.
J 37. Conducting effective meetings.

SUMMARY

Competencies

A list of 54 competencies, organized in 15 functions, was identified from the literature review. The field validation clearly supported 53 of these items but only weakly supported the seventeenth item, "Negotiating union agreements". A number of additions were proposed during the field validation and a final proposed list of 71 competencies was prepared.

There is a good deal of overlap between the 71 competencies and previous studies. These competencies appear to be comprehensive, at least for trainers in 1986.

We recommend that the added and changed competencies be subjected to further validation.

Tasks

As indicated in Section III, we looked into specifying more detailed tasks. The literature proved too diverse to be helpful. The field validation provided some assistance in identifying more specific tasks, but there is further work to do in this area. Perhaps it was too much to expect the level of detail required in a review of the literature. It seems that a proper DACUM exercise is needed, and we recommend that a series of DACUM workshops be convened. Each workshop should be composed of practitioners of a single role, and sufficient time should be allotted to the exercise to identify, sort, and assign priority to tasks.

Roles

The results of the field validation proved to be very similar from one group to the next. The OSTD group identified four roles, which were identical to the roles presented in their competency profile. The Association group identified five roles, which were similar to the OSTD roles, except for the separation of the managerial role into two roles: (1) manager; and (2) administrator. The OACE group's six identified roles include four similar to the OSTD roles, and two additional roles: (1) researcher/evaluator; and (2) promoter/marketer.

However, when the groups were asked to identify competencies which were important for each role, the results were quite divergent. For the roles of instructor/deliverer/teacher and designer/developer/program planner, the three groups chose similar competencies, suggesting that these two roles have similar meanings to the three groups. The three groups saw very different competencies as required for the roles of manager and consultant.

It is somewhat difficult to interpret these results. Is it possible that the last two roles are context-specific, and thus the needed competencies vary depending on the context? Or is it possible that the three groups have very different ideas of the roles designated by similar labels? In any case, we recommend that care be taken in designing curricula for these

roles. It may not be possible to create training programs which are of use to more than one profession.

GLOSSARY

. ASTD--American Society for Training and Development

. Competency. A statement of behaviour which entails the possession of knowledge, the ability to perform necessary skills, and higher-order cognitive abilities, such as the ability to be critically evaluative of information.

. DACUM. Developing A CUrriculuM. The word represents both the PROCESS used in developing the curriculum and the product, a CHART stating the curriculum outline.

. Function. A category of a competency. Functions were first identified inductively from a review of the literature, and then validated by the three groups of practitioners.

. OACE. Ontario Association for Continuing Education

. Occupational Role. A specific occupation within the training profession. In this report the occupational roles were identified by three validation groups of practitioners.

. OSTD. Ontario Society for Training and Development

. Semi-anthropological Approach. An approach which draws on qualitative research traditions and involves an extensive analysis of behaviour in context, and an analysis of job descriptions. The general goal is to isolate certain latent categories and to describe the phenomena of the categories and the relationships among the categories.

. Task. A subdivision of a competency. Each competency can be broken down into both knowledge and skill components. Some writers argue that competencies can only be described by example behaviours.

BIBLIOGRAPHY

Association for Educational Communications and Technology (1981). Competencies for the Instructional/Developmental Professional. Journal of Instructional Development, 5(1), 14-15. ERIC CIJE EJ 255 200(1.010).

Bennett, R. and Leduchowitz, T. (1983). What makes an effective teacher? Journal of European Industrial Training (Human Resources Development) 7(2), 2-46. ERIC CIJE 285 032(1.020).

Burrichter, A. W. and Gardner, D. L. (1978). A staff development model for adult educators: Process, content and assessment (Tech. Rep.). Boca Raton, FL: Florida Atlantic University. ERIC Document ED 203 012(1.030).

Chalofsky, N. E. and Cerlo, J. A. (1975, December). Professional development program for federal government trainers: A United States Civil Service Commission research effort. Training and Development Journal, pp. 18-20. (1.040).

Chalofsky, N. E. and Cerlo. J. A. (1975, December). Improving the effectiveness of employee development specialists: Report of findings of a study conducted by the Bureau of Training, United States Civil Service Commission. Training and Development Journal, pp. 21-2[illegible] (1.050).

Fernandez, E. (1982, Summer). Competencies needed by training and development managers with implications for training programs. Unpublished doctoral dissertation, Colorado State University. Fort Collins, CO. Abstract in Dissertation Abstracts International, 1983, 43(7), 128A (1.060).

Gates, D. D. (1982, April). Determining the skill and training needs of community education directors: An inquiry into methods. Unpublished doctoral dissertation, Western Michigan University. Kalamazoo, MI. Abstract in Dissertation Abstracts International, 1982, 43(20), 347-A, DA 8215925 (1.070).

Goldsmith, J. (1979). Competence assessment within a professional training program. New Directions for Experiential Learning, 3, 53-63. ERIC CIJE EF 285 032 (1.080).

Gonzales, I. M., Howell, D. L. and Lindley, W. I. (1984, Summer). Professional competencies needed by extension agents in the Pennsylvania Cooperative Extension Service. Journal of the American Association of Teacher Educators in Agriculture, 25(2), 30-36. ERIC CIJE EJ 301 005 (1.090).

Hall, J. A. (1980). An analysis of competencies needed by community education co-ordinators in implementing a community education program. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University. Blacksburg, VA. Abstract in Dissertation Abstracts International, 1980, 41(03), 913-A, 8020208 (1.110).

Henderson, R. D. (1980, November). A study to identify in-service educational needs of selected Minnesota retail business trainers. Unpublished doctoral dissertation, University of Minnesota. Minneapolis, MN. Abstract in Dissertation Abstracts International, 1981, 41(11), 4692-A, 8109541 (1.110).

Kenny, J. B. (1984, February). Trainer appraisal and accreditation. Canadian Vocational Journal. 19(4), 42-44. ERIC CIJE EJ 294 370 (1.120).

Leduchowicz, T. (1982). Trainer role and effectiveness: A review of the literature. International Journal of Manpower. 3(1). (1.130).

Manpower Services Commission (United Kingdom) (1978). First Report of the Training of Trainers Committee (Tech. Rep.). London, England: Training Services Division. Her Majesty's Stationery Office (HMSO). Reviewed in Leduchowicz (1982). (1.140).

Manpower Services Commission (United Kingdom) (1980). Second Report of the Training of Trainers Committee: Direct Trainers (Tech. Rep.). London, England: Training Services Division. Her Majesty's Stationery Office (HMSO). Mentioned in Leduchowicz (1982) (1.150).

McCullough, M. and McLagan, P. (1983). Keeping the competency model alive: Applications for the training and development profession. Training and Development Journal, 37, 24-28. (1.160).

McGlynn, P. W. (1980). A study of personality characteristics of teachers in selected naval technical training schools. Unpublished doctoral dissertation, University of Southern Mississippi. Hattiesburg, MS. Abstract in Dissertation Abstracts International, 1981, 41(11), 4656-A, 8109883 (1.170).

McLagan, P. A. (1980). Competency models. Training and Development Journal, 34(12), 22-26. ERIC CIJE 235 892 (1.180).

McLagan, P. A. (1983). Models for excellence. Washington, D. C.: American Society for Training and Development. (1.200).

McLagan, P. A. and Bedrick, D. (1983). Models of excellence: The results of the American Society for Training and Development competency study. Training and Development Journal, 37(6), 10-20. (1.200).

Ontario Society for Training and Development (1976, December). Core competencies of a trainer. Canadian Training Methods. 9(4), I-XVI. (1.210).

Ontario Society for Training and Development (1979). Competency analysis for trainers: A personal planning guide. Toronto, Ontario: OSTD. (1.220).

Ontario Society for Training and Development. (1981). Professional development accreditation program. Toronto, Ontario: OSTD. (1.230).

Pinto, P. R. and Walker, J. R. (1978, July). What do training and development professionals really do? Training and Development Journal, 32, 58 64. (1.250).

Reed, J. G. (1984, October). Preparing the training and development professional: Skills and knowledge essential for practice. Journal of Business Education, 60(1), 8-13. ERIC CIJE 306 174 (1.260).

Suessmuth, P. (1974, June). Criteria for selecting trainers. Canadian Training Methods, 7(1), 14-16. ERIC CIJE EJ 102 180. Same as following paper. (1.270).

Suessmuth, P. (1978). Criteria for selecting trainers. In Ideas for training managers and supervisors: Useful suggestions, activities and instruments. La Jolla, CA: University Associates. (1.280).

Suessmuth, P. F. and Cumberland, W. H. (Eds.). (1985). Weighted bibliography: Learning resources for T&D/HRD practitioners. Toronto, Ontario: OSTD. (1.240).

Training Magazine (1984, September). Training skills ranked: Thinking, writing and speaking still tops. Training, 21. 107-108. (1.290).

Trimby, M. J. (1982). Entry level competencies for team members and supervisors on instructional development teams in business and industry. Unpublished doctoral dissertation, Michigan State University. East Lansing, MI. Abstract in Dissertation Abstracts International, 1982, 43(2), 346-A, DA 8216594 (1.300).

Weischadle, D. E. (1984, April). Teachers make excellent trainers? Performance and Instruction, 23(3), 22-24. ERIC CIJE EJ 303 135 (1.310).

Young, R. and Cummings, P. (1977, March). Portrait of a training executive. Training and Development Journal, 31,21-22. (1.320).

SUPPLEMENTAL BIBLIOGRAPHY

Adams, R. E. (1975). DACUM (Developing A CUrriculuM, learning and evaluation in occupational training (Tech. Rep.). Ottawa, Ontario: Department of Regional Economic Expansion. Second edition. (2.010).

Allen, C. R. (1919). The instructor: The man and the job. Chicago,IL: J. B. Lippincott Co. For history's sake. (2.002).

Balogh, S.P. (1982). A comparative study of business and industry trainers as adult learners. Unpublished doctoral dissertation, Ohio State University. Columbus, OH. Abstract in Dissertation Abstracts International, 1983, 43, 2530-A 8300204 (2.030).

Bell, C. R. (1983, June). The high performance trainer. Training and Development Journal, 37, 42-45. (2.040).

Brewster, J. H. (1972). A study of an emerging occupational group...state directors of law enforcement training: Their backgrounds and perceptions of their role. Unpublished doctoral dissertation, George Washington University. Washington, D. C.. (2.050).

Bruny, S. P. (1970). Educational and exoeriential backgrounds of adult educators in Franklin County, Ohio and their training needs. Unpublished doctoral dissertation, Ohio State University. Columbus, OH. See Evans (1980) and Balogh (1982) (2.060).

Caldwell, R. M. and Marcel, M. (1985, January). Evaluating trainers: In search of the perfect method. Training. (2.070).

Carey, A. and Varney, G. H. (1983, April). Which skills spell success in OD? Training and Development Journal, 37, 38-40.

Chapman, R.S. (1973, January-February). Principles of learning and management courses. Canadian Manager. (2.090).

Conklin, C. R. (1984). Competencies of adult educators and their preferred and actual setting for training. Unpublished doctoral dissertation, University of Akron. Akron, OH. Abstract in Dissertation Abstracts International, 1984, 45(03), 722-A, DA 8414642. (2.100).

Davis, G. L. (1977, August). A study of the competencies and training needed by community services personnel as perceived by selected staff members in Florida's public community colleges. Unpublished doctoral dissertation, Florida State University. Tallahassee, FL. Abstract in Dissertation Abstracts International, 1978, 38(9), 5189-A, 7801471. (2.110).

DiGeorgio, R. M. (1982, June). Training needs of people new to training. Training and Development Journal, 36(6), 16-25. (2.120).

DiPaolo, A. and Patterson, A. C. (1983, January). Selecting a training program for new trainers. Training and Development Journal, 37(1), 96-101. (2.130).

Epstein, J. (1971). Line managers' perceptions and expectations of the operational function of an employee development specialist in the federal government research and development organization. Unpublished doctoral dissertation, George Washington University. Washington, D. C.. (2.140).

Evans, C. M. (1980). The part-time community faculty member as an adult educator: A needs assessment based on their competencies for helping adults to learn. Unpublished doctoral dissertation, Ohio State University. Columbus, OH. See Bruny (1970) and Balogh (1982) (2.150).

Feldman, G. (1976). The internal consulting role of training officers in city governments. Unpublished doctoral dissertation, George Washington University. Washington, D. C.. (2.160).

Fellenz, R. A. (1981). A comprehensive approach to staff development: A source book. Unpublished doctoral dissertation, Texas A & M University. College Station, TX. Abstract in Dissertation Abstracts International, 1981, ED 200 748 (2.170).

Fortey, J. T. (1981). Professional competencies for home economics teachers of culturally disadvantaged students. Unpublished doctoral dissertation, Kent State University. Kent, OH. Abstract in Dissertation Abstracts International, 1982, 42(07), 3038-A, 8128489. (2.180).

Gibb, P. (1982, July). The facilitative trainer. Training and Development Journal, 36(7), 14-19. ERIC CIJE CE 512 184 (2.190).

Glaser, R. O. and Otto, C. R. (1970). The Management Development Personnel. Reading, Mass.: Addison-Wesley. (2.200).

Gossage, L. C. (1968, June). Qualifications and educational needs of Industrial Training Directors. Training and Development Journal. pp. 2-12. (2.210).

Hamilton (1982, July). Training those who design training programs. Training and Development Journal, 36(7), 36-43. (2.220).

Hauser, J. G. (1980). A study of professional development and self-perceived needs for continuing professional education among selected training specialists. Unpublished doctoral dissertation, Northern Illinois University. Dekalb, IL. Abstract in Dissertation Abstracts International, 1981, 41(08), 3380-A, 8101432. (2.240).

Heinich, C. R. (1982, March). Preparation programs for educators in corporate settings. Paper presented at the American Educational Research Association, New York meeting. ERIC Document ED 217 213 (2.230).

Internal Revenue Service (U.S.) (1976). Manager's guide to selecting training employees (Tech. Rep.). Washington, D. C.: United States Department of the Treasury. ERIC Document ED 131255 (2.250).

Johnson, R. B. (1976). Organization and management of training. In R. I. Crocus (Ed.), Training and development handbook (2nd ed.). New York: McGraw-Hill. (2.260).

Knowles, M. S. (1976, September). Speaking from experience - separating the amateurs from the pros in training. Training and Development. 30. 16-17. (2.270).

Langen, D. L. (1980). The training director: Competencies for the future. Unpublished doctoral dissertation, Texas A & M University. College Station, TX. Abstract in Dissertation Abstracts International, 1980, 41(06), 2479-A, 8023045. (2.280).

Lee, C. (1984, August). How to hire the right trainer. Training, 21(8), 22-32. ERIC CIJE EJ 302 304 (2.290).

Legacy, J. W. (1976). Identifying technical teacher competencies in agricultural and occupational education. Unpublished doctoral dissertation, Cornell University. Ithaca, NY. Abstract in Dissertation Abstracts International, 1978, 38(9), 5193-A, 7801664 (2.295).

Nadler, L. (1980, May). ASTD professional development cluster. Training and Development Journal. 34, 24-32. (2.300).

Nadler, L. (1983). Human Resources Development: The perspective of business and industry. ERIC Document 232 061 (2.310).

Odiorne, G. S. (1985, January). Human resource strategies for the '80's. Training. (2.320).

Ontario Ministry of Colleges and Universities (1973). Training for Ontario's Future: Report of the Task Force on Industrial Training (Tech. Rep.). Manpower Training Branch. (2.330).

Peloquin, J. (1982, September). Technical trainers are incompetent! Training and Development Journal, 36, 16-17. (2.340).

Peters, T. J. and Waterman, R. H., Jr. (1982). In search of excellence: Lessons from America's best-run companies. New York: Harper and Row.

Smith, J. (1982). An empirically-derived Human Resource Development training model for institutions of higher learning. Unpublished doctoral dissertation, University of Northern Colorado. Greely, CO. Abstract in Dissertation Abstracts International, 1983, 43(09), 2905-A, DA 8301178. (2.350).

Steinmetz, C. S. (1976). The history of training. In R. L. Craig (Ed.), Training and Development Handbook. St. Louis, MO.: McGraw-Hill. (2.360).

Thomas, A., Beatty, D., Ironside, D., Herman, R. (1978). Learning in Organizations (Tech. Rep.). Department of Adult Education, OISE.

Tracey, W. R. (1971). Designing Training and Development Systems. New York: American Management Association. (2.370).

Tracey, W. R. (1974). Managing training and development systems. New York: Amacom. (2.380).

Training News (1982, May). Should trainers be certified? Training News. (2.390).

Training (1982,1983,1984,1985, October). Training magazine industry reports. Training Magazine.

Traynor, W. J. (1975, October). Evaluating your Training and Development Manager. Training and Development Journal. pp. 27-35. (2.400).

Yule, D. L. G. (1978). Management of learning in work settings. Unpublished doctoral dissertation, Ontario Institute for Studies in Education, University of Toronto. (2.410).

Zemke, R. (1979). Trainers, who they are, what they think. Training/HRD, 16(2), 18. (2.420).